NATIONAL IMAGERY AND MAPPING AGENCY

IMPLEMENTATION PLAN
FOR THE
DEPARTMENT OF DEFENSE
JOINT TECHNICAL ARCHITECTURE

18 February 1999

Mission

Provide timely, relevant, and accurate imagery, imagery intelligence, and geospatial information in support of national security objectives

Vision

Guaranteeing the information edge

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U-001-99/SOSE

MEMORANDUM FOR DEPUTY DIRECTOR, OPERATIONS
DEPUTY DIRECTOR, SYSTEMS AND TECHNOLOGY
DEPUTY DIRECTOR, CORPORATE AFFAIRS
ASSOCIATE DEPUTY DIRECTORS
OFFICE DIRECTORS

SUBJECT: NIMA Implementation Plan for the DoD Joint
Technical Architecture (JTA)

REFERENCE: Under Secretary of Defense (Acquisition and
Technology) memorandum, 30 November 1998, subject:
DoD Joint Technical Architecture (JTA) Version 2.0

1. On 30 November 1998, version 2.0 of the DoD JTA superseded
version 1.0 as the minimum set of information technology
standards for the acquisition of all DoD systems that produce,
use, or exchange information. Implementation of the appropriate
JTA standards is required for all DoD Acquisition Categories,
non-DoD 5000 series acquisitions, as well as pre-acquisition
programs such as: Advanced Concept Technology Demonstrations,
Advanced Technology Demonstrations, and Joint Warrior
Interoperability Demonstrations. NIMA has developed a JTA
Implementation Plan (enclosed).

2. As Functional Manager for imagery, imagery intelligence and
geospatial investment activities, I view the implementation of
the JTA to be integral in achieving interoperability across the
Imagery and Geospatial Community (IGC). I am committed to making
the JTA a central part of NIMA's acquisition and development
process and to provide guidance to the IGC in matters promoting
interoperability and the use of common standards. NIMA has
developed the United States Imagery and Geospatial Information
System (USIGS) Technical Architecture (UTA) as a profile of the
DoD JTA for the IGC.

3. The JTA Implementation Plan describes NIMA's approach for
evaluating USIGS and NIMA business systems for standards
compliance. The plan is applicable to all NIMA Information
Technology (IT) acquisition program managers throughout the
entire life cycle of their programs as well as to those NIMA
organizations preparing Functional Manager's Guidance to the IGC.

SUBJECT: NIMA Implementation Plan for the DoD Joint Technical
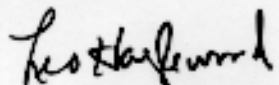Architecture (JTA)

4. The responsibilities within NIMA for this activity are as
follows:

    a. <u>Deputy Director, Corporate Affairs</u>: Publish Functional
Manager's Guidance to the IGC which includes guidance concerning
the UTA and JTA.

    b. <u>Deputy Director, Systems and Technology</u>: Establish and
enforce JTA implementation policy as NIMA's Component Acquisition
Executive; develop and maintain the UTA and associated systems
engineering processes; assess all new, migration, and
experimental NIMA IT programs for standards compliance; identify,
plan for, and implement applicable UTA requirements for those
acquisition and development activities delivering systems or
prototypes to operational environments.

    c. <u>All NIMA IT Acquisition Program Managers</u> (Systems and
Technology, Operations, Corporate Affairs): Identify, plan for
and implement applicable UTA requirements for programs for which
they have acquisition responsibility.

5. The point of contact for this matter is Mr. Joseph Wesdock,
SOS, mail stop C-3, (703) 808-0739.

for JAMES C. KING
    Lieutenant General, USA

Enclosure a/s

FOREWORD

A strong foundation of interoperability among all Imagery and Geospatial Community (IGC) systems is critical in the complex and dynamic environment that characterizes today's world. Imagery and geospatial information is needed by a wide variety of users with both global and domestic requirements including members of the intelligence, defense, and diplomatic communities, our international partners, as well as members of the civil, academic, and commercial communities. Although these users represent a diverse set of missions, they share a common requirement for information access and exchange. To that end, the United States Imagery and Geospatial Information System (USIGS) Technical Architecture (UTA), a profile of the DoD Joint Technical Architecture (JTA), has evolved to provide the minimum set of information technology standards that, when implemented, permit quick and seamless flow of information.

As Functional Manager for the IGC, NIMA has the responsibility to promote interoperability across the diverse systems that comprise USIGS. NIMA's JTA Implementation Plan establishes a process to ensure that the interoperability standards as set forth by the DoD JTA become an inherent part of NIMA's acquisition and development process in support of the IGC. This plan is responsive to DoD direction as well as to NIMA's goal to lead the IGC in acquiring, deploying, maintaining, and continuously improving USIGS.

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1.0 Purpose

Version 2.0 of the Department of Defense (DoD) Joint Technical Architecture (JTA) superseded JTA version 1.0 on 30 November 1998 (reference (a)). The JTA now mandates the minimum set of information technology (IT) standards and guidance for the acquisition of *all* DoD systems that produce, use, or exchange information.

The purpose of this implementation plan is to describe NIMA's approach for implementing the DoD JTA as required by reference (a).

2.0 Scope

The requirement for JTA compliance includes those NIMA systems that are part of the United States Imagery and Geospatial Information System (USIGS), as well as NIMA business applications. As Functional Manager for the Imagery and Geospatial Community (IGC), NIMA's responsibility for JTA standards compliance also extends to those USIGS systems which are not directly developed by NIMA, but are nonetheless part of the diverse network of systems that exploit imagery, imagery intelligence, and geospatial information. NIMA fulfills this responsibility, in part, by publishing the USIGS Technical Architecture (UTA) for use by the entire IGC and by adopting and developing standards, conventions, and guidelines which are needed for USIGS but are not yet part of the JTA.

Figure 2-1 graphically represents the scope of NIMA's JTA implementation effort. The JTA consists of a set of core standards and four functional domains: Command, Control, Communication, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR); Weapon Systems; Combat Support; and Modeling & Simulation. In addition to the standards identified for a particular functional domain, all domains are required to comply with the set of JTA core standards. USIGS applications, all part of the C4ISR domain, fall into the following four elements: Information Management, Archive & Dissemination, Exploitation & Production, and Infrastructure. NIMA business applications, part of the Combat Support domain, provide support services such as human resources, finance, procurements & contracts, decision support, and mission support.

Figure 2-1 also lists the subdomain annexes identified in the JTA. The subdomain names shown in bold are present in version 2.0 of the JTA. The remaining subdomains are candidates for inclusion in future JTA versions. Airborne Reconnaissance is the only C4ISR subdomain currently populated.

3.0 Applicability

This plan applies to all NIMA IT acquisition program managers throughout the entire life cycle of their programs as well as to those NIMA organizations preparing Functional Manager's Guidance to the IGC.
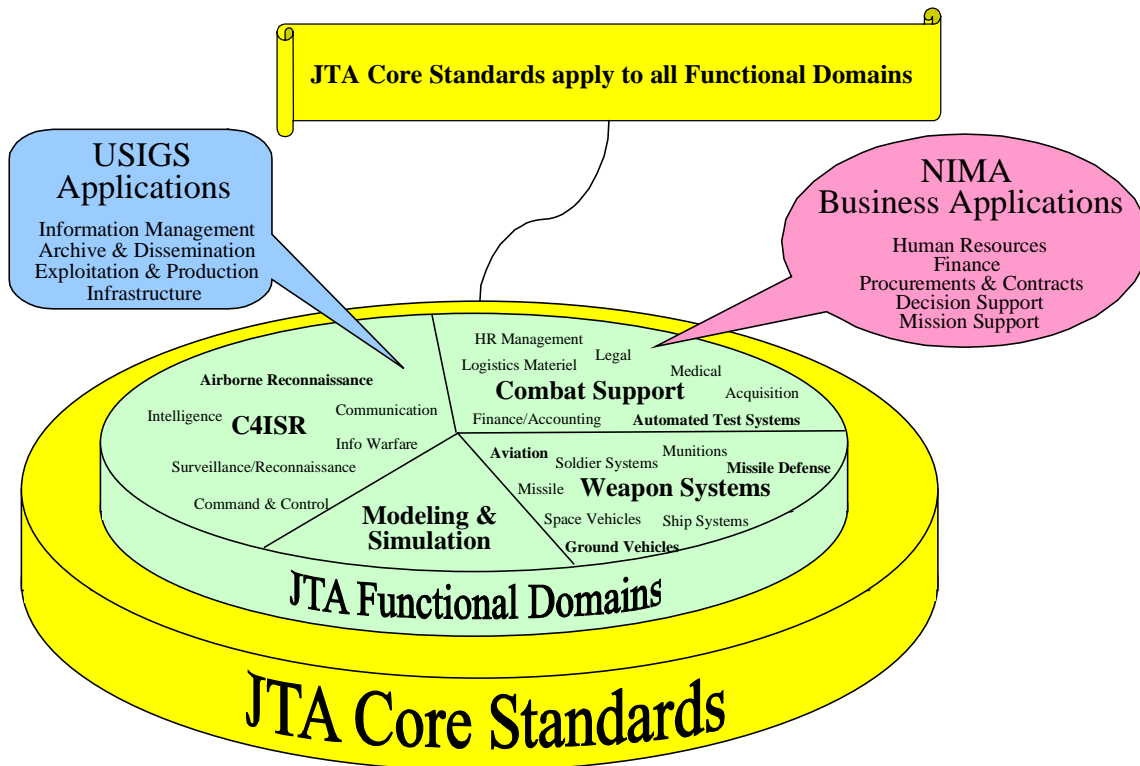
Figure 2-1

4.0 Terms of Reference

4.1 DoD Joint Technical Architecture (JTA)

The DoD JTA mandates the minimum set of standards and guidelines for the acquisition of all DoD systems that produce, use or exchange information. The JTA is to be used by anyone involved in the management, development, or acquisition of new or upgraded systems within DoD.

4.1.1 JTA Core

The JTA core, or main body, identifies commercial and Government standards common to most DoD information technology systems, grouped into categories: Information Processing Standards; Information Transfer Standards; Information Modeling, Metadata, and Information Exchange Standards; Human-Computer Interface Standards; and Information Systems Security Standards.

4.1.2 JTA Domain Annexes

Recognizing that there are additional service areas, interfaces, and standards (JTA elements) common within families of related systems (i.e., domains), the JTA adopted the notion of domain and subdomain annexes. A domain represents a grouping of systems sharing common functional, behavioral and operational requirements. The JTA domain annexes contain domain-specific JTA elements applicable within the specified family of systems, to further support interoperability within the systems represented in the domain - in addition to those included in the JTA core. The JTA currently defines four domains: C4ISR, Weapon Systems, Modeling and Simulation, and Combat Support.

4.1.2.1 Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Domain

The C4ISR domain consists of those integrated systems of doctrine, procedures, organizational structures, personnel, equipment, facilities, and communications whose primary function is to:

– Support properly designated commanders in the exercise of authority and direction over assigned and attached forces across the range of military operations;
– Collect, process, integrate, analyze, evaluate, or interpret available information concerning foreign countries or areas;
– Systematically observe aerospace, surface or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means; or
– Obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

The C4ISR Domain Annex to the JTA identifies elements (i.e., standards, interfaces, and service areas) specific to the functional areas of C4ISR that *are additions to those standards listed in the JTA core*. These additions are common to the majority of C4ISR systems and support the functional requirements of C4ISR systems.

4.1.2.2 Combat Support Domain

The Combat Support domain addresses those specific elements necessary for the production, use, or exchange of information within and among systems supporting personnel, logistics, and other functions required for maintaining operations or combat. The Combat Support domain consists of automated systems that perform combat service support and administrative business functions, such as acquisition, finance, human resources management, legal, logistics, transportation, and medical functions. The majority of NIMA business (corporate) applications are within the Combat Support domain.

4.2 Imagery and Geospatial Community (IGC)

The composition of cooperating commands, services, agencies, and departments within the U.S. Government, foreign governments, and private sector organizations involved in the acquisition, production, exploitation, and dissemination of imagery, imagery intelligence, and geospatial information.

4.3 United States Imagery and Geospatial Information System (USIGS)

The extensive network of systems used by the DoD and the Intelligence Community to share and exploit imagery, imagery intelligence, and geospatial information. These systems provide capabilities involved with the integrated information management, collection, production, exploitation, dissemination and archive, and infrastructure of this information.

4.4 USIGS Technical Architecture (UTA)

NIMA has developed the UTA (reference (e)) as a profile of the DoD JTA for the IGC. The UTA establishes the minimum set of IT standards, conventions, and guidelines applicable to USIGS and NIMA business systems.

4.5 Functional Manager's Guidance (FMG)
High-level guidance provided to the IGC regarding USIGS programs, initiatives, and activities. The goal of the FMG is to enable IGC members to anticipate both operational and budgetary impacts to their working environments. In particular, the FMG enables program managers to more accurately prepare their yearly Intelligence Program Objectives Memorandum (IPOM) and Program Objectives Memorandum (POM) submissions.

4.6 Legacy System
A Legacy System is an existing NIMA system with a lifespan not expected to exceed FY2005. In general, NIMA legacy systems will not be retrofitted for the sole purpose of achieving UTA compliance.

4.7 Migration System
A Migration system is an existing NIMA system expected to still be in service after FY2005 and which will receive substantial financial investment over the FY00-05 FYDP. Migration systems will be analyzed on a case-by-case basis to determine which UTA standards apply to them and when they must be modified to achieve UTA compliance.

4.8 Next Generation System
A Next Generation system is one which does not currently exist, but is expected to exist at some point in the future. All next generation systems are required to plan for and achieve UTA compliance at Initial Operating Capability (IOC).

4.9 Experimental System
An experimental system is a hardware or software tool/system under development or investigation in a NIMA lab environment. An experimental system is under evaluation for potential integration into the USIGS and NIMA operational baseline. Some of these tools/systems may have limited fielding in operational environments.

4.10 UTA Compliance
UTA compliance is achieved when a USIGS system or NIMA business system has implemented all the applicable standards in all relevant JTA and UTA service areas.

5.0 Process

There are five major elements to NIMA's JTA Implementation Plan:
- Standards Compliance Assessment
- Systems Acquisition
- Systems Engineering
- Functional Manager's Guidance
- UTA and JTA Waivers

5.1 Standards Compliance Assessment
The UTA contains a standards compliance "checklist" that serves as a tool for NIMA acquisition, development, and program management personnel, as well as other IGC stakeholders, to assess compliance with and produce metrics against applicable UTA standards. The compliance checklist

includes standards from the JTA Combat Support domain annex so that it can be used for assessing NIMA business applications in addition to USIGS applications.

In preparation for the compliance assessment process, NIMA systems (those that are part of USIGS as well as NIMA business systems) have been categorized as legacy, migration, next generation, or experimental (Attachment A). All migration, next generation, and experimental systems will be evaluated using the UTA Standards Compliance Checklist. Legacy systems will not be addressed unless a critical interoperability issue is at stake. The standards compliance review will focus on key interoperability standards of particular interest to NIMA and the IGC. The review will evaluate where each NIMA and USIGS program is today with regard to UTA standards compliance: What standards are applicable, what standards the systems <u>are</u> complying with, what standards they are <u>not</u> complying with, and what standards they intend to comply with and when. The standards compliance checklist will also be provided as guidance to IGC members developing systems that are part of or must interface with the USIGS.

NIMA has already begun an effort to conduct a standards assessment of major USIGS development programs using the process outlined above. The list of systems being assessed along with a schedule is included at Attachment B.

<u>5.2 Systems Acquisition</u>
The completed standards checklists and associated analyses will support program funding decisions, scheduling decisions, and to develop a time-phased migration path to full UTA compliance for each system. The UTA will be implemented across NIMA in accordance with the policy and procedures outlined in DoD 5000.2-R. UTA compliance requirements will continue to be incorporated into user requirements documents, system requirement documents, and new system development contracts. The standards checklist will be used as a tool for all NIMA project managers, acquisition personnel, and their support contractors to evaluate new, migration, or experimental projects for conformance with the mandatory standards specified in the UTA. The checklist will be used to evaluate requirements documents, statements of work, requests for proposal, and other such acquisition documents. The NIMA Program Implementation Document (PID) (reference (h)) establishes further direction to NIMA acquisition personnel regarding standard program management methodologies including UTA standards-awareness throughout NIMA's formal acquisition process. The time-phased aspect of the profiles provide a means for assessing progress toward implementation of the UTA standards and hence a measure of progress toward interoperability. UTA compliance is achieved when a system has implemented the applicable standards for the relevant service areas.

<u>5.3 Systems Engineering</u>
Compliance with UTA and JTA standards must be an integral part of NIMA's system engineering process. Critical aspects of this process include development and maintenance of the USIGS Interoperability Profile (UIP), the USIGS Data Structure Management process, and the configuration management process.

<u>5.3.1 USIGS Interoperability Profile (UIP)</u>
A critical element of the USIGS system engineering process is the identification and definition of the major components of USIGS and their detailed, technical interface requirements. These requirements are defined in the USIGS Interoperability Profile (UIP) (reference (f)), a component of the USIGS

System Architecture. The UIP profiles key, enterprise-level data interchange and application program interface standards for specific USIGS components. The UIP takes critical interoperability standards defined in the UTA and places their implementation on a system-specific effectivity schedule. The implementation profiles for these standards are defined in the UIP to ensure consistent interpretation and application for a specific set of USIGS systems. The UIP is therefore key to enabling interoperability between diverse USIGS systems and is a critical part of the standards-implementation effort.

5.3.2 USIGS Data Structure Management
Critical to the development or upgrade of integrated, interoperable systems are standards associated with information modeling, metadata, and information exchange. Recognizing this fact, NIMA has established the USIGS Data Structures Management Process (DSMP) (reference (i)) with the objective to identify, model, and control USIGS data structures that are shared throughout the IGC. At the core of the DSMP is the development of the USIGS Conceptual Data Model (UCDM) which represents a precise, unambiguous definition of imagery and geospatial data elements and how those data elements interrelate. This management approach ensures that consistent, accurate information is delivered to the IGC and facilitates interoperability among USIGS systems.

5.3.3 Configuration Management
Each completed UTA Standards Compliance Checklist will constitute a system-specific standards profile which will be added as an appendix to the UTA and formally controlled by the NIMA Configuration Control Board (NCCB). As system or program changes occur over time, NIMA's existing configuration management (CM) process will be used to staff and adjudicate any proposed changes to the standards profiles. The CM-controlled standards profiles will provide NIMA with a means of overseeing and guiding standards implementation in system requirements development, analysis, design, development, and fielding.

5.4 Functional Manager's Guidance
DoD Directive 5105.60 (reference (c)) designates the Director, NIMA as the functional manager for imagery, imagery intelligence, and geospatial investment activities. As such, NIMA is responsible for the promulgation of guidance to the IGC in matters promoting interoperability and the use of common standards among USIGS systems. This guidance is published annually in the Functional Manager's Guidance for the IGC (reference (d)) and will include direction concerning maintenance and use of the UTA.

5.5 UTA and JTA Waivers
Systems must consider cost, schedule and performance impacts in determining the pace of implementing applicable standards. In some cases, a system may be unable to implement mandatory standards.   A Waiver to applicable JTA and UTA mandated standards can be granted by the NIMA Component Acquisition Executive (CAE) with secondary concurrence by ASD(C3I) and USD(A&T). To assist the CAE, a UTA or JTA waiver shall clearly document the reasons and justifications for failing to comply with mandatory standards and shall be signed by the responsible program manager and their PEO. The Associate Deputy Director for Systems will evaluate JTA and UTA waiver requests from program offices and recommend approval or disapproval to NIMA's CAE.

6.0 Roles and Responsibilities

6.1 NIMA (Deputy Director, Corporate Affairs)
- Publish Functional Manager's Guidance to the IGC, including guidance concerning the UTA.

6.2 NIMA (Deputy Director, Systems and Technology)
- Establish and enforce JTA implementation policy as NIMA's Component Acquisition Executive (CAE)
- Approve or disapprove UTA and JTA waiver requests (JTA waivers must also have the concurrence of USD(A&T) and ASD(C3I) (DoD CIO))

6.2.1 NIMA (Associate Deputy Director, Systems)
- Develop and maintain the UTA and system-specific standards profiles
- Develop and maintain the UIP
- Assess and evaluate all NIMA IT programs for UTA standards compliance
- Update NIMA's JTA Implementation Plan as required
- Provide NIMA's representative to the JTA Development Group (JTADG)
- Assist program offices on UTA implementation issues
- Evaluate JTA and UTA waiver requests and recommend approval or disapproval to NIMA's CAE
- Develop and maintain NIMA's Data Structure Management Process (DSMP) Guidelines and the USIGS Conceptual Data Model (UCDM)

6.2.2 NIMA (Associate Deputy Director, Technology)
- Identify, plan for, and implement applicable UTA requirements for those acquisition and development activities delivering systems or prototypes to operational environments
- Provide feedback on UTA implementation issues to the NIMA System Engineering and Integration Office

6.3 NIMA IT Acquisition Program Managers (Systems and Technology, Operations, Corporate Affairs)
- Identify, plan for, and implement applicable UTA requirements for those programs for which they have acquisition responsibility
- Provide feedback on UTA implementation issues to the NIMA System Engineering and Integration Office
- Support the development of time-phased standards profiles for their development programs
- Generate waivers as appropriate

7.0 Training and Education

A comprehensive set of tutorials, briefings, and literature designed to address a broad range of educational needs related to the UTA and the JTA are available upon request to NIMA/SOSE. In addition, NIMA/SOSE maintains a web page on the OSIS, the Intelink, and the internet containing relevant standards documents, briefings, and other related information. This information is also published on the USIGS Architecture & Standards CD-ROM.

8.0 References

(a) USD(A&T) Memorandum, dated 30 November 1998, subject: DoD Joint Technical Architecture (JTA) Version 2.0.
(b) Joint Technical Architecture (JTA), Version 2.0, 26 May 1998.
(c) DoD Directive 5105.60, National Imagery and Mapping Agency (NIMA), October 11, 1996.
(d) Functional Manager's Guidance for the Imagery and Geospatial Community FY2001-2005, 31 January, 1999.
(e) USIGS Technical Architecture (UTA-A), Revision A, 26 January 1999.
(f) USIGS Interoperability Profile, 24 November 1998.
(g) USIGS Configuration Management Plan (USIGS-CMP), Revision A, 25 August 1998.
(h) NIMA Program Implementation Document (PID), 28 July 1998.
(i) USIGS Data Structure Management Process Guideline, 4 February 1999.

Attachment A: System/Segment Matrix

The following table is sorted first by Program Management Office, then by Life-Cycle Category, and then alphabetically by System/Segment Acronym.

SYSTEM/ SEGMENT ACRONYM	SYSTEM/SEGMENT NAME	PROGRAM MANAGEMENT OFFICE	LIFE-CYCLE CATEGORY*
GC DB	Foxbase/Foxpro Database for GC	CA/GC	Legacy
DocsOpen/ Lawpack	General Counsel Database in PC environment	CA/GC	Migration
DMATS	Defense Mapping Agency Training System	CA/HR	Legacy
NCIS	NIMA Career Inventory System	CA/HR	Legacy
PIQS	Personnel Information Query System	CA/HR	Legacy
DTA	Dispute Tracking and Analysis System	CA/HR	Migration
PARIS	PARIS	CA/HR	Migration
PeopleSoft	PeopleSoft	CA/HR	Migration
AVICS	Audio Visual - Info Channel System	CA/MS	Migration
EMCS - East & West	Energy Monitoring Control System	CA/MS	Migration
Fire Alarm System	Fire Alarm System, Pyrotronics XL3 & MXL Notifier 2020	CA/MS	Migration
MDI - Safenet 100	Security Management System	CA/MS	Migration
OSP	Occupational Safety Professional	CA/MS	Migration
SMS	Security Management System	CA/MS	Migration
PUBLAN	NP SCI Publications LAN	CA/NP	Migration
PA Desktops	PA Desktop System	CA/PA	Migration
PA LAN	PA Local Area Network	CA/PA	Migration
PRISM	Windows Procurement Request Information System	CA/PC	Migration
CPA	Custom Product Activity	DO/GI	Legacy
PEDB	Product & Extraction Data Base	DO/GI	Legacy
GMH	Global Modernization (Hungarian)	DO/GI	Migration
ISEE	Integrated Source Exploitation Environment	DO/GI	Migration
NPF	NIMA Prototyping Facility	DO/GI	Migration
SAS	Surveyors Augmentation System	DO/GI	Migration
STADEST	STADEST	DO/GI	Migration
PERIGEE	Perspective Image Generation and Exploitation Suite	DO/IA	Legacy
PIP	Power Image Processor	DO/IA	Legacy
ESSAW	Environmental Sciences Softcopy Analysis Workstation	DO/IA	Migration

SYSTEM/ SEGMENT ACRONYM	SYSTEM/SEGMENT NAME	PROGRAM MANAGEMENT OFFICE	LIFE-CYCLE CATEGORY*
GAMES	Geometric and Modeling Exploitation System	DO/IA	Migration
ILS	Techlib Integrated Library System	DO/IS	Legacy
MIS	Map Index System	DO/IS	Legacy
ILS	Voyager Integrated Library System	DO/IS	Migration
Edge HW/SW	Edge Software and SGI HW for edge processing	DO/TO	Migration
RMBS	Requirements Management Budget System	DO/TO	Migration
DOORS	Dynamic Object-Oriented Requirements System	ST/ARR	Migration
AV	Administrative Voice (NIMA leased, NIMA owned)	ST/SOC	Migration
CDE-AS	Application Services -CDE	ST/SOC	Migration
IMDAS	Information Management Div. Automation System	ST/SOC	Migration
NTSBU-AS (OA)	Application Services -NTSBU (OA)	ST/SOC	Migration
NTSCI-AS	Application Services -NTSCI	ST/SOC	Migration
SDAS	Security Division Automation System	ST/SOC	Migration
SVEN	Secure Voice Red, Green, STU III	ST/SOC	Migration
VTC	Video Teleconference System	ST/SOC	Migration
5D	Demand Driven Direct Digital Dissemination Server	ST/SOD	Legacy
ANALYST	ANALYST	ST/SOD	Legacy
ANMS	Automated Notice to Mariners System	ST/SOD	Legacy
APS Micro-5	Automatic Print System (Micro-5)	ST/SOD	Legacy
BES	Bathymetric Evaluation System	ST/SOD	Legacy
CHIPS	Classified Hydrographic Information Processing System	ST/SOD	Legacy
CNS	Consolidated Navigation System	ST/SOD	Legacy
COMAC/Oneida	COMAC / Oneida WS	ST/SOD	Legacy
CP Net	Custom Product Net	ST/SOD	Legacy
DDS/DE	Defense Dissemination System/Dissemination Element	ST/SOD	Legacy
DDS/RE	DDS/Receive Element	ST/SOD	Legacy
DDS/RL	Defense Dissemination System/Receive Location	ST/SOD	Legacy
DS/S	Data Services Segment	ST/SOD	Legacy
FMS	Film Management System	ST/SOD	Legacy
GIMS	Geodetic Information Management System	ST/SOD	Legacy
HYSAS	Hydrographic Source Assessment System	ST/SOD	Legacy
IDC-A	Image Data Controller - A	ST/SOD	Legacy
IDC-A Replacement	IDC-A Replacement	ST/SOD	Legacy

SYSTEM/ SEGMENT ACRONYM	SYSTEM/SEGMENT NAME	PROGRAM MANAGEMENT OFFICE	LIFE-CYCLE CATEGORY*
IDEX CPA	Imagery Data Exploitation System	ST/SOD	Legacy
IDEX II	Imagery Data Exploitation System II	ST/SOD	Legacy
IPA	Image Product Archive	ST/SOD	Legacy
MCS	Modernized Catalog System	ST/SOD	Legacy
NAVINFONET	Navigation Information Network	ST/SOD	Legacy
NSS	Navigation Safety System	ST/SOD	Legacy
PM/S	Production Management Segment	ST/SOD	Legacy
RRS	Remote Replication System	ST/SOD	Legacy
RTP	Remote Tape Processor	ST/SOD	Legacy
SA/S	Source Acquisition Segment	ST/SOD	Legacy
TDS	Tape Duplication System	ST/SOD	Legacy
UNISYS	UNISYS-St. Louis	ST/SOD	Legacy
CIL	Command Information Library	ST/SOD	Migration
CPD	Consolidated Product Database	ST/SOD	Migration
CSIL	Commercial Satellite Imagery Library	ST/SOD	Migration
CTPS	Computer to Plate System	ST/SOD	Migration
DIS	DPS Interface Server	ST/SOD	Migration
DPDW	Digital Product Data Warehouse	ST/SOD	Migration
DPITS	Digital Photographic Interpretation System	ST/SOD	Migration
EPS	Enhanced Processing System	ST/SOD	Migration
GLDB	Geodetic Library Data Base (Part of GIMS)	ST/SOD	Migration
GNS	GEONet Names Server	ST/SOD	Migration
IAS	Information Access Services	ST/SOD	Migration
IPL	Image Product Library	ST/SOD	Migration
MCS	Modernized Catalog System	ST/SOD	Migration
NIL	National Information Library	ST/SOD	Migration
OPTRONICS	OPTRONICS Scanning/Digitizing System	ST/SOD	Migration
Paper Sheeter	Paper Sheeter	ST/SOD	Migration
PFPS	Paper Fold & Pack System	ST/SOD	Migration
PHOTYPES	Compugraphic Typesetter	ST/SOD	Migration
Presses	Printing Press (MAN ROLAND 55")	ST/SOD	Migration
Presses	Lithographic Equipment	ST/SOD	Migration
Presses	Printing Presses (40" presses, 63" press)	ST/SOD	Migration
RSL	Repromat Scanning Lab System	ST/SOD	Migration
VERSATEC	VERSATEC Plotter	ST/SOD	Migration
XYNETICS	XYNETICS Plotter	ST/SOD	Migration
MC&G IL	Mapping, Charting, & Geodesy Information Library	ST/SOD	Next Generation
MDL	Management Data Library	ST/SOD	Next Generation

SYSTEM/ SEGMENT ACRONYM	SYSTEM/SEGMENT NAME	PROGRAM MANAGEMENT OFFICE	LIFE-CYCLE CATEGORY*
ADDE	Aeronautical Digital Data Environment	ST/SOE	Legacy
ADRG 1	ADRG P/S 1	ST/SOE	Legacy
AES II	Advanced Edit System/Single Integrated Operation Production System	ST/SOE	Legacy
AIEE	Aeronautical Image Exploitation Environment	ST/SOE	Legacy
AMS	Aeronautical Migration Systems	ST/SOE	Legacy
AOE	Aeronautical Obstacle Environment	ST/SOE	Legacy
ASE	Aeronautical Source Environment	ST/SOE	Legacy
CAC/PS	Compressed Aeronautical Chart Production System	ST/SOE	Legacy
CADAS	Computer Aided Design Analysis System	ST/SOE	Legacy
CIB/PS	Controlled Image Base/Production System	ST/SOE	Legacy
CICCS	Color Imaging Color Copying System	ST/SOE	Legacy
CPS	Cluster Process System	ST/SOE	Legacy
DAFIPS	Digital Aeronautical Flight Information CD-ROM Pre-mastering System	ST/SOE	Legacy
DC/S	Digital Comparator Segment	ST/SOE	Legacy
DCAFE	Data Capture and Finishing Environment	ST/SOE	Legacy
DEA	DE Alpha	ST/SOE	Legacy
DEW_ Drop	DEW_ Drop	ST/SOE	Legacy
DGSS	Digital Geodetic Support System	ST/SOE	Legacy
DIGS	Dig Image Georef System	ST/SOE	Legacy
DOIS	Digital Orthorectified Imaging System	ST/SOE	Legacy
FE/S	Feature Extraction Segment	ST/SOE	Legacy
FPE	Front-end Processing Environment	ST/SOE	Legacy
GDAS II	Geodetic Data Applications System II	ST/SOE	Legacy
GGEPS	G&G Enhanced Production System	ST/SOE	Legacy
GMGSS	Global Modernization (GSS)	ST/SOE	Legacy
HE/S	Hardcopy Exploitation Segment	ST/SOE	Legacy
ICSU	Interact Comp Sys Upgrade	ST/SOE	Legacy
IMP	Imagery Modernization Program	ST/SOE	Legacy
IQRS	Interactive Quality Review System	ST/SOE	Legacy
LTMS	Light Table Mensuration System	ST/SOE	Legacy
MATRIX	Multi-Source Automatic Target Recognition Interactive Exploitation System	ST/SOE	Legacy
MET	Multi-Image Exploitation Tool	ST/SOE	Legacy
NPC	NIMA Production Cell	ST/SOE	Legacy
NSPilot	NIMA Softcopy Pilot	ST/SOE	Legacy
PAMS	Pooled Analytical Mensuration System (TA3P)	ST/SOE	Legacy
PASS	Pooled Analytical Stereo System	ST/SOE	Legacy

SYSTEM/ SEGMENT ACRONYM	SYSTEM/SEGMENT NAME	PROGRAM MANAGEMENT OFFICE	LIFE-CYCLE CATEGORY*
PG/S	Product Generation Segment	ST/SOE	Legacy
SP/S	Source Preparation Segment	ST/SOE	Legacy
TADS	Text Aeronautical Data System	ST/SOE	Legacy
TAPS	Terminal Approach Production System	ST/SOE	Legacy
TERCOM/VS	TERCOM Validation Processor	ST/SOE	Legacy
TMS	Target Management System	ST/SOE	Legacy
VPF / PS	Vector Product Format Production System	ST/SOE	Legacy
ADMS	Automated Data NIMA Monitor Stations	ST/SOE	Migration
ADRG 2	ADRG P/S 2	ST/SOE	Migration
ASMS	Advanced Sensor Modeling System	ST/SOE	Migration
Astrolabe (A35M)	A35M Astrolabe System	ST/SOE	Migration
CADRG	Compressed Arc Digitized Raster Graphics	ST/SOE	Migration
CMPS	Common Mapping Production System	ST/SOE	Migration
CRISS	Crisis Support System	ST/SOE	Migration
DGRS	Differential GPS Reference Stations	ST/SOE	Migration
ENDDS	Electronic Navigation Digital Data System	ST/SOE	Migration
GGMS	G&G Modern Survey Systems	ST/SOE	Migration
GPS Rec'd Pro	GPS Receivers (Procurement)	ST/SOE	Migration
GPS Rec'd Repair	GPS Receivers (Repair)	ST/SOE	Migration
GPSNCC	GPS Network Control Center	ST/SOE	Migration
Gravimeter	Absolute Gravimeter	ST/SOE	Migration
GSTSS	GPS Sled Track Survey System	ST/SOE	Migration
IEC	Integrated Exploitation Capability	ST/SOE	Migration
JMTK	Joint Mapping Toolkit	ST/SOE	Migration
Magnetometer	Magnetometer	ST/SOE	Migration
MAWS	Metric Assessment Work Station	ST/SOE	Migration
MINT	Multisource Intelligence Toolkit	ST/SOE	Migration
OMNIS	GPS Orbit Mensuration & Navigation Improvement System	ST/SOE	Migration
PGPS	Point Graphic Production System	ST/SOE	Migration
PPPS	Point Positioning Production System	ST/SOE	Migration
Rain_Drop	Rain_Drop	ST/SOE	Migration
Ruler	Ruler	ST/SOE	Migration
SEG 18	Assess Seg (Seg 18)	ST/SOE	Migration
SNSS	Special Navy Support System	ST/SOE	Migration
TS EDMS	Total Stations EDMS	ST/SOE	Migration
ACES	ACES	ST/SOM	Legacy
ALE	Aries Life Extension (DIA owned)	ST/SOM	Legacy

SYSTEM/ SEGMENT ACRONYM	SYSTEM/SEGMENT NAME	PROGRAM MANAGEMENT OFFICE	LIFE-CYCLE CATEGORY*
GIMDE 2000	Geospatial Information Management Data Environment 2000	ST/SOM	Legacy
NDDS	NIS Data Distribution Server	ST/SOM	Legacy
NDS	NIMA Data System	ST/SOM	Legacy
NES/CS	NES Comm Servers	ST/SOM	Legacy
NRS	National Regional Server	ST/SOM	Legacy
RMS	Requirements Management System	ST/SOM	Legacy
ARCTURUS	ARCTURUS	ST/SOM	Migration
IESS	Image Exploitation Support System	ST/SOM	Migration
NES	National Exploitation System	ST/SOM	Migration
SRDB	Shared Requirements Data Base	ST/SOM	Migration
STATT	Systems Tasking and Tracking Tool	ST/SOM	Migration
OET	Order Entry & Tracking	ST/SOM	Next Generation
WFM	Workflow Management	ST/SOM	Next Generation
ACMS	Automated Configuration Management System	ST/SON	Legacy
AIDE-DE-CAMP	AIDE-DE-CAMP (True Change)	ST/SON	Legacy
Apriori	Apriori	ST/SON	Legacy
ARGUS	Automated Remote Global Update System	ST/SON	Legacy
Hyperchannel	Hyperchannel	ST/SON	Legacy
NMUS	NDS Multi User Server	ST/SON	Legacy
Phase IV	Phase IV	ST/SON	Legacy
ACS	ACS	ST/SON	Migration
ATLAS	Automated Tape Library System	ST/SON	Migration
CLERIC	CLERIC	ST/SON	Migration
CSCS	Communications Security Control System	ST/SON	Migration
DEACON	DEACON	ST/SON	Migration
IDME	DPS Integrated Development and Maintenance Environment	ST/SON	Migration
INTS	Integrated NIMA Telecommunications System	ST/SON	Migration
NBS	NBS-NPIC Info Sys (Backup System)	ST/SON	Migration
NDBIDI Servers	National Data Base of Imagery Derived Information Servers	ST/SON	Migration
NIMA DTC	NIMA Desktop Computers	ST/SON	Migration
NISNET	WNY-NISNET	ST/SON	Migration
NPTS	NPTS-NPIC Product Transfer System	ST/SON	Migration
NSCS	NPIC Security Control System	ST/SON	Migration
OSIS	Internet and OSIS Systems	ST/SON	Migration
PAS AS LAN	NIMA/PA Analysis and Simulation LAN	ST/SON	Migration
REMH	Replacement External Message Handler	ST/SON	Migration

SYSTEM/ SEGMENT ACRONYM	SYSTEM/SEGMENT NAME	PROGRAM MANAGEMENT OFFICE	LIFE-CYCLE CATEGORY*
RETROSPECT	RETROSPECT	ST/SON	Migration
SBU Firewall	SBU Network Firewall	ST/SON	Migration
SBU Servers & S/W	SBU N/W Servers & Server S/W	ST/SON	Migration
SBU SMS	SBU Network Systems Management Server	ST/SON	Migration
SCEN	Secret Collateral Enterprise Network	ST/SON	Migration
SKYLAN	SKYLAN	ST/SON	Migration
SPECTRUM	SPECTRUM Network Management	ST/SON	Migration
SPO	Single Point Operations	ST/SON	Migration
VICAR	VICAR	ST/SON	Migration
WF B/LAN	Westfields Classified LAN	ST/SON	Migration
CIGSS	Common Imagery Ground/Surface System	ST/SOS	Migration
CINEBASE	CINEBASE	ST/T	Experimental
DSF	Director's Suspense File	ST/T	Experimental
EPPE	EPPE lab (SUN systems and SGI Systems)	ST/T	Experimental
NEF	NEF Database (Non-conventional Exploitation Factors)	ST/T	Experimental
Quicksilver	Quicksilver	ST/T	Experimental
TDS (Non-Enterprise)	Technology Desktop Systems (Non-Enterprise)	ST/T	Experimental
UMENS	Unconventional Mensuration System	ST/T	Experimental
DDB	Dynamic Data Base	ST/T	Legacy
GNPS	Geographic Names Processing System	ST/T	Legacy
NPDS	NIMA Prototype Development System	ST/T	Legacy
ATMS	Assisted Target Monitoring System	ST/T	Migration
FOCUS	FOCUS	ST/T	Migration
NIMAMUSE	NIMAMUSE	ST/T	Migration
Powerscene	Powerscene	ST/T	Migration

* LIFE-CYCLE CATEGORY CODES:
- LEGACY = SYSTEM GONE BY 2005
- MIGRATION = SYSTEM WILL EXIST BEYOND FY2005 AND WILL RECEIVE SUBSTANTIAL FINANCIAL INVESTMENT OVER THE FY00-05 FYDP
- NEXT GENERATION = SYSTEM DOES NOT CURRENTLY EXIST, BUT WILL EXIST AT SOME POINT IN THE FUTURE
- EXPERIMENTAL = HARDWARE OR SOFTWARE TOOLS/SYSTEMS UNDER DEVELOPMENT OR INVESTIGATION IN A NIMA LAB ENVIRONMENT FOR POTENTIAL INTEGRATION INTO THE USIGS AND NIMA OPERATIONAL BASELINE. SOME OF THESE TOOLS/SYSTEMS MAY HAVE LIMITED FIELDING IN OPERATIONAL ENVIRONMENTS.

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Attachment B: 1999 Schedule of Standards Compliance Assessments

The key USIGS development programs selected for standards compliance assessment during 1999 are as follows:

Phase II (Initial Assessments):

- Image Product Library (IPL): Migration
- Integrated Exploitation Capability (IEC): Migration
- Information Access Services (IAS): Migration
- NIMA Libraries (NL):
  ° National Information Library (NIL): Migration
  ° Command Information Library (CIL): Migration
  ° Mapping, Charting and Geodesy (MC&G) Information Library: Next Generation
- Imagery Exploitation Support System Enhanced Analyst Client (IESS(EAC)): Migration

Phase III (Follow-on Assessments):

- Order Entry and Tracking (OET): Next Generation
- Workflow Management (WFM): Next Generation
- Management Data Library (MDL): Next Generation
- Software Tools
  ° Rain_Drop: Migration
  ° Joint Mapping Toolkit (JMTK): Migration
  ° Multi-source Intelligence Toolkit (MINT): Migration
  ° Ruler: Migration

1999 Schedule of Assessments

Nov	Dec	Jan '99	Feb	Mar	Apr	May	Jun

PHASE I: Planning

PHASE II: Initial Assessments

Collect & Analyze

Brief AR/ SERB/ SO

Kickoff Meeting

UTA RFC #1 Study Overview/ IPL profile

UTA RFC #2 IEC/IAS/NL/IESS profiles

Jul	Aug	Sep	Oct	Nov	Dec

PHASE III: Follow-on Assessments

Collect & Analyze

UTA RFC #3 OET/WFM/MDL profiles

UTA RFC #4 Tools profiles (RainDrop, MINT, JMTK, Ruler) & finalized plan for next series of assessments

Note: RFCs represent changes to the USIGS Technical Architecture (UTA) to add the completed standards profile for each system/segment being evaluated.